

SHORT COMMUNICATION

SOME OBSERVATIONS ON THE USE OF MEDICINAL PLANTS FROM PRIMARY AND SECONDARY GROWTH BY THE RUNA OF EASTERN LOWLAND ECUADOR

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Amazonian rain forests are often depicted in the popular literature as "drug stores," with the implication that indigenous peoples use them much like city-dwellers go to the corner pharmacy for an aspirin or some other remedy. Recent observations I made on the medical culture in a Runa (Quichua-speaking Indian) community in eastern lowland Ecuador challenge this notion. Indeed, numerous primary forest taxa are recognized medicinals but few receive frequent use. An examination of medicinal plant usage patterns revealed secondary vegetation as a much richer source of useful species.

Observations on medicinal plant use were made from February to July 1990 in Río Blanco (Napo province, 77°40'W; 1°00'S, 440 m elevation), a small Runa settlement (population ca. 100). Río Blanco residents hunt, fish, and grow crops such as manioc, and peach palm (*Bactris gasipaes* H.B.K., Arecaceae). Panned gold, coffee, cacao, and corn are sold in order to purchase items such as salt, gun powder, machetes, clothing, and Western medicines. Despite the availability of Western goods including remedies, the Runa continue to rely heavily on medicinal plants. Runa medical culture is examined in greater depth elsewhere (Kohn 1992).

In order to determine usage patterns, medicinal plants were classified according to the habitat in which they were collected: primary forest (*rucu sachá*), secondary forest (*mauca*), and garden (*chagra*). Most secondary forest plots in Río Blanco are the result of agricultural disturbances created as much as 25 years ago when the area was first settled. Primary forest taxa are occasionally present in these plots because of sparing and transplantation.

The classification of medicinal plants by habitat confirmed an expected parallel and revealed an unanticipated paradox. Although medicinal plant occurrence paralleled the general trend of increased species diversity during forest succession, the importance of a plant assemblage as a source of remedies was not related to the number of useful species within it, indicating that other factors determine usage patterns. Fifty-four percent of the 191 medicinal species collected (Table 1) occurred in primary forest, 29% were growing in secondary forest, and 17% occurred in gardens (Fig. 1). However, medicinals from secondary forest and gardens were more frequently used than those from primary forest. I observed applications with 25 different taxa: 40% of these were collected in gardens, 36% in secondary forest, and 24% came from primary forest (Fig. 2). Thirty-one

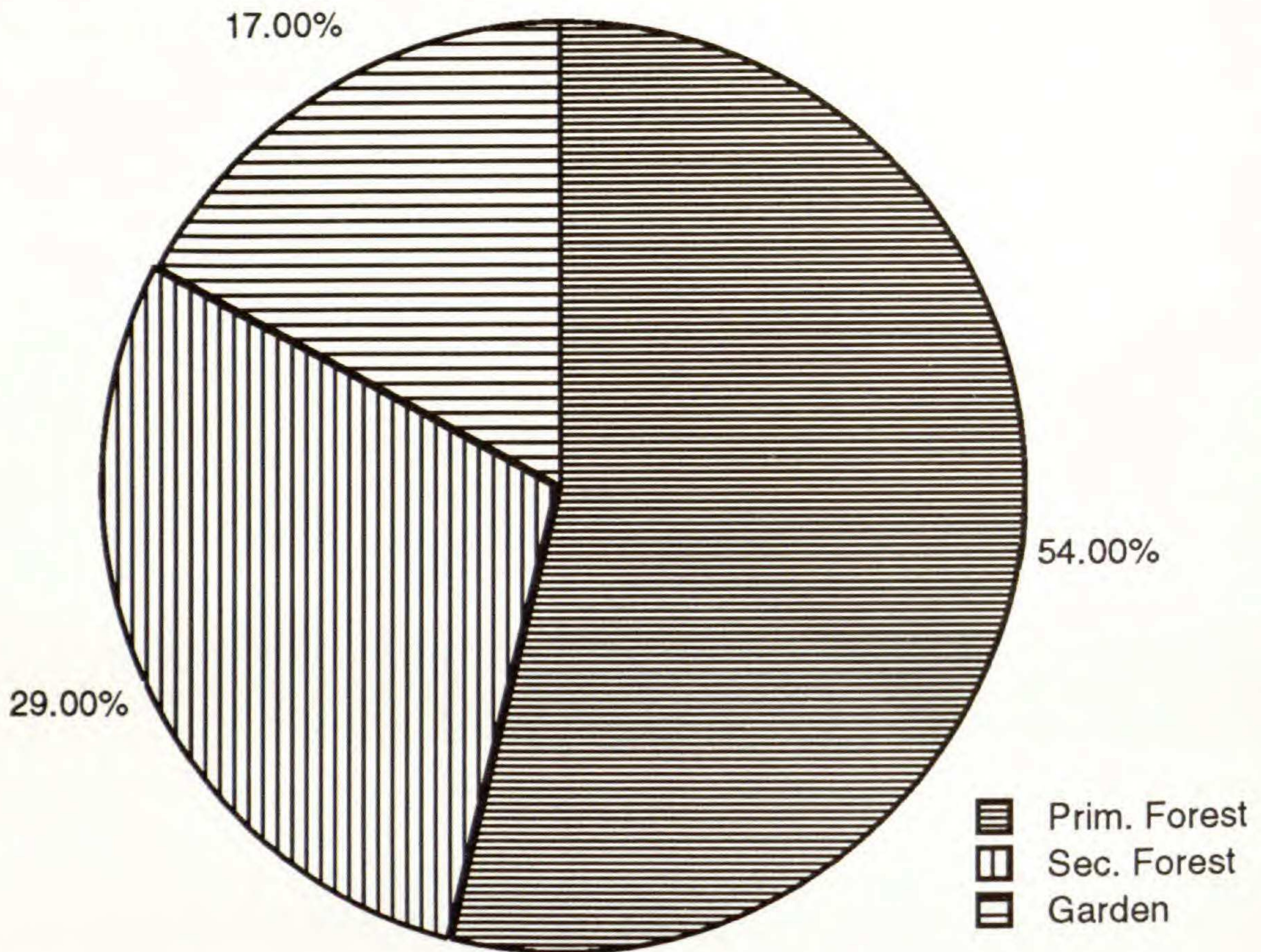


FIG. 1.—The distribution of the collected medicinals according to the habitat in which they were found.

percent of the 32 garden medicinals collected and 16% of the 56 secondary forest medicinals were observed being used. Only 6% of the 103 primary forest taxa were observed in use (Fig. 3).

Although medicinals appear to be incorporated into the Runa materia medica because of efficaciousness—Marles et al. (1988) found pharmacological and chemical literature supporting traditional plant uses for 28% of the species they collected among the Runa of Napo province—other considerations encourage disproportionate reliance on plants from disturbed habitats. Plant conspicuousness, cultural taboos, multipurpose utility, and ease of transplantation may encourage the use of some medicinals instead of others.

Early successional species tend to be gregarious and thus more conspicuous and accessible than the often highly dispersed forest taxa. Furthermore, although primary forest occurs no more than 200 m from any doorstep, the Runa do not venture lightly into the forest—the home of potentially dangerous spirits (*supai*)—and do so only to accomplish specific tasks. Women and children rarely enter the forest alone.

Frequently used plants are also cultivated in gardens and other disturbed areas and many have multiple uses. For example, a variety of preparations of the cultigen *tahucu* (*Nicotiana tabacum* L., Solanaceae) are used medicinally: cigar smoke is blown over patients during shamanistic curing sessions; moistened leaves are administered as an emetic; tobacco juice is aspirated nasally to treat head colds

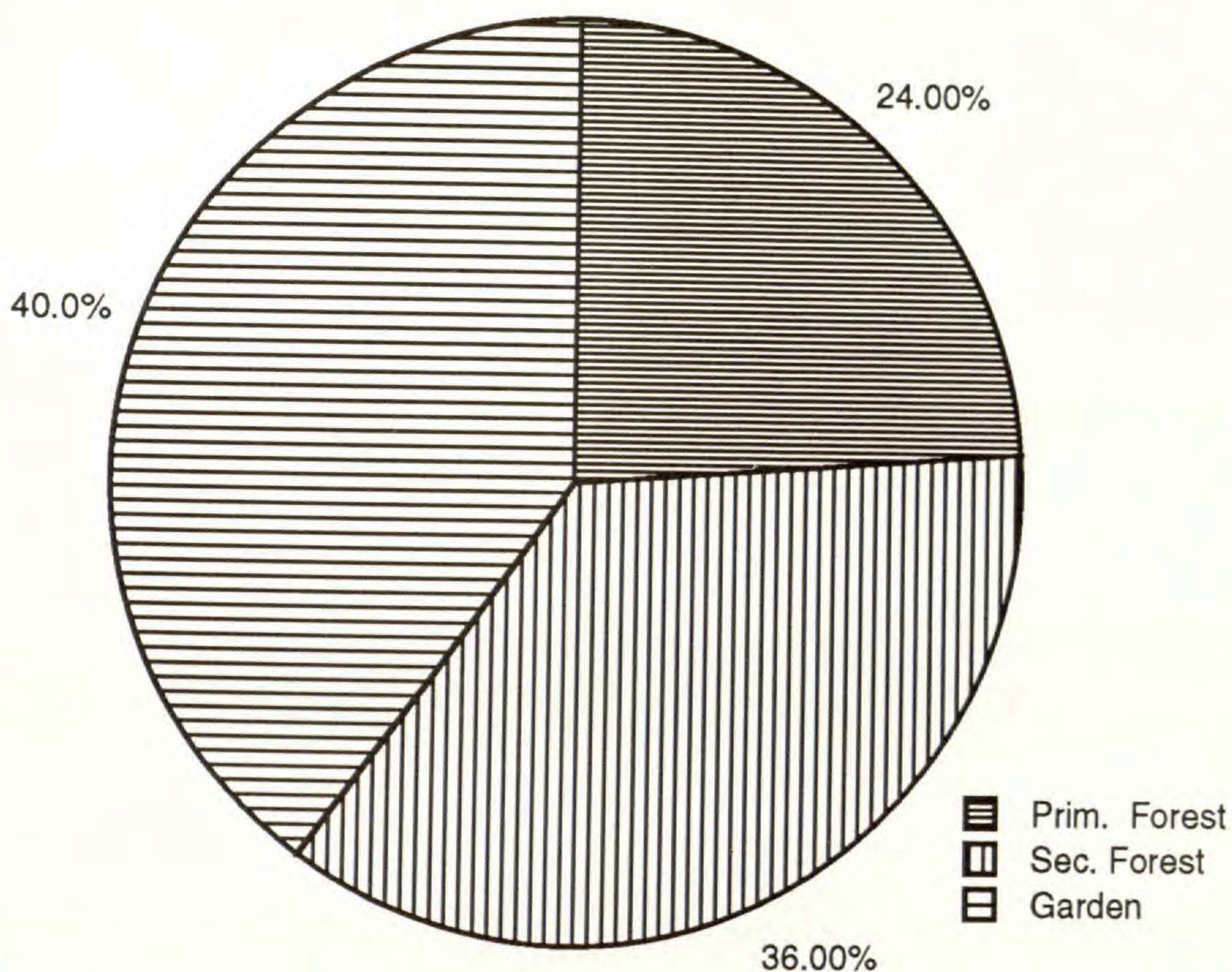


FIG. 2.—The distribution of medicinal plants whose application was observed according to the habitat in which they were collected.

and drunk as a narcotic; tobacco resin is used to expel subcutaneous *hualun curu* (probably *Dermatobia hominis*) larvae; and poultices are applied to treat a variety of ailments ranging from chest pains to infected blisters.

For convenience, frequently utilized forest medicinals are often transplanted to disturbed areas. Of the 34 species recorded in cultivation, eight had recently been transplanted from primary forest. Some transplants, such as *dunduma* (*Cyperus* sp., Cyperaceae), *ajus huasca* (*Mansoa* cf. *alliacea* (Lam.) A. Gentry, Bignoniaceae), *amarun caspi* (*Ouratea* sp., Ochnaceae), *yahuar purungu panga* (*Mikania* sp., Asteraceae), and *tahucu sisa* (Campanulaceae), are cultivated in open gardens. Others, such as *machacui huishu* (*Malpighia* cf. *glabra*, Malpighiaceae), are planted beneath secondary growth or in plantings of coffee intercropped with cacao and peach palm, presumably because these associations duplicate late successional habitats from which the taxa were transplanted. Still other transplants, such as *mati cara* (*Clavija* sp., Theophrastaceae) and *curarina* (*Potalia amara* Aublet, Loganiaceae), are more broadly tolerant and persist as resources in fallowed areas. However, not all primary forest medicinals are easily transplanted. Río Blanco residents have been unable to cultivate the commonly used midcanopy tree *chucchu huasha* (*Maytenus* sp., Celastraceae) apparently because, like many other climax taxa, it is drought sensitive. Furthermore, slow-growing late successional plants may not produce useful quantities of secondary metabolites for several decades, making cultivation impractical.

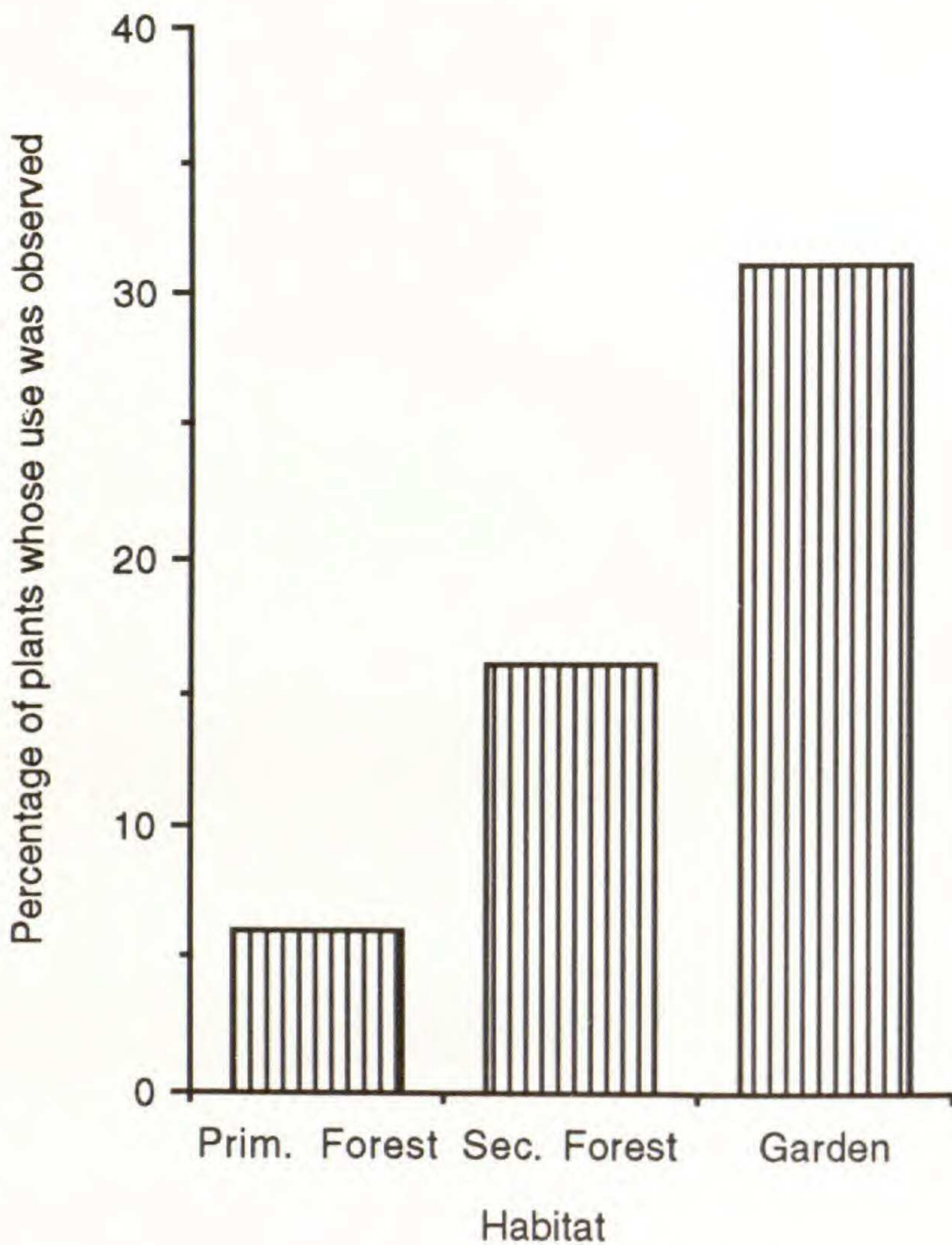


FIG. 3.—The percentage of plants from each habitat whose application was observed.

The high species diversity of primary forest and the many medicinals found there have encouraged observers to overemphasize climax taxa and to underrate the importance of secondary communities to native pharmacopoeias. Primary forest is certainly an important resource but more so as a source of medicinal propagules than as a "drug store." Surveys elsewhere would determine whether the pattern of plant usage in Río Blanco is a general one among Amazonians.

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TABLE 1.—Medicinal plants collected in Río Blanco. The common Quichua or Spanish name is given after the Latin name. This information is followed by: the habitat in which the plant was collected; the way in which the plant is used or the malady for which it is said to be useful; and whether the author observed the plant in use.

Scientific Name	Common Name	Habitat	Use	Use Ob.
<i>Abuta grandifolia</i>	payanchi yurac, yahuate caspi	Secondary forest	diarrhea, regulate menstruation	Yes
<i>Acacia glomerosa</i>	huaranga	Primary forest	colds	Yes
<i>Acalypha</i> sp.	ita quhuilchic	Secondary forest	diarrhea, bloody diarrhea	No
<i>Allophylus</i> sp.	cambia	Primary forest	snake bite	No
Amaryllidaceae	sacha cebolla	Garden	tumors	No
Annonaceae	lichihua yurac pechiche	Primary forest	cataracts	No
Annonaceae	remo caspi, pinja cara	Primary forest	body pains, diarrhea, stomach ache	No
<i>Anthurium ernestii</i>	zingra panga	Primary forest	arthritis, rheumatism	No
<i>A. pendulifolium</i>	suní zingra panga	Primary forest	arthritis, rheumatism	No
<i>A. polyschistum</i>	not given	Primary forest	topical parasitic and fungal infections	No
<i>Anthurium</i> sect., <i>Pteromischum</i> sp. nov.	not given	Primary forest	love magic	No
<i>Anthurium</i> sp.	pasumu panga, concordia	Primary forest	postpartum inflammations, pains, malaise	No
<i>Anthurium</i> sp.	yami panga	Primary forest	applied to the legs of children with difficulty walking	No
<i>Aristolochia</i> sp.	saragosa	Primary forest	diarrhea, cough, stomach ache	No
Asteraceae	aya huachi	Secondary forest	acne, hypopigmentation	No
<i>Bactris</i> sp.	ucu mari chunda	Primary forest	sore joints	No
<i>Banisteriopsis caapi</i>	aya huasca	Secondary forest	hallucinogen	Yes
<i>Batocarpus</i> sp. ?	negro caspi	Primary forest	tonic	No
<i>Batocarpus</i> sp. ?	sacha paparagua	Primary forest	infected wounds	No
<i>Bauhinia</i> sp.	yacu yutsuc	Primary forest	diarrhea	No
<i>Begonia parviflora</i>	bibitsic	Secondary forest	inflammations	No
<i>Begonia</i> sp.	auru panga, pungi panga	Primary forest	medicinal	No
<i>Bixa orellana</i>	manduru	Secondary forest	accelerate birth	No
<i>Blechnum browneii</i>	quibiu quihua	Garden	sprains	Yes
<i>Bolbitis</i> sp. ?	cutu chupa	Secondary forest	diarrhea	No
<i>Brosimum utile</i>	pucuna caspi	Primary forest	vermifuge	No
<i>Brownea</i> sp.	cruz caspi	Primary forest	regulate menstruation	No
<i>Brugmansia</i> sp.	huantuc	Garden	body pains, inflammations	No
<i>Brugmansia</i> sp.	sasi huantuc	Garden	hallucinogen, body pains	No

TABLE 1. (continued)

Scientific Name	Common Name	Habitat	Use	Use Ob.
<i>Brunfelsia</i> cf. <i>grandiflora</i>	sacha chiri huayusa	Primary forest	postpartum fevers, body pains, emetic, narcotic, hunting luck, colds	No
<i>B. grandiflora</i>	chiri huayusa	Garden	postpartum fevers, body pains, emetic, narcotic, hunting luck, colds	No
<i>Brunfelsia</i> sp.	sacha chiri huayusa	Primary forest	postpartum fevers, body pains, emetic, narcotic, hunting luck, colds	No
<i>Caladium</i> sp.	hualun mandi	Secondary forest	expel bot fly larvae	No
<i>Calliandra angustifolia</i>	ichilla yutsu, chiparo pequeño	Primary forest	diarrhea	No
<i>Calypttranthes</i> sp.	sani mulchi	Primary forest	menstruation, hemorrhage	No
Campanulaceae	tahuco sisa	Garden	liver ailments, tumors	No
<i>Campelia zanonía</i>	quilun quilun	Secondary forest	cuts	No
<i>Capsicum</i> sp.	uchu	Garden	expel illness-bringing spirits from the body and house, diarrhea	Yes
<i>Carludovica palmata</i>	lisan	Secondary forest	"zingra" (rheumatism?)	No
<i>Cephaelis</i> sp. or <i>Psychotria</i> sp.	chiri panga	Primary forest	rattle/fan for curing ceremonies	Yes
<i>Cephaelis williamsii</i>	yan chipi panga	Primary forest	colds	No
<i>Citrus</i> sp.	limun	Garden	diarrhea, nausea, fever	Yes
<i>Clavija</i> sp.	mati cara	Garden	snake bite	No
<i>Clavija</i> sp.	llushti mati cara	Secondary forest	snake bite	No
<i>Clavija</i> sp.	jatun mati cara	Primary forest	snake bite	No
<i>Clidemia heterophylla</i>	uchan	Primary forest	body pains, stomach ache, colds	No
<i>Clidemia</i> sp.	uchan	Primary forest	body pains, stomach ache, colds	No
<i>Columnea</i> sp.	dumbiqui callu panga	Secondary forest	hemorrhages, reduce menstrual flow	No
Commelinaceae	shungu nanai panga, supi panga	Primary forest	liver	No
<i>Cordia nodosa</i>	araña caspi	Primary forest	snake and spider bites, infections	No
<i>Costus</i> sp.	sacha iru	Primary forest	diabetes	No
<i>Coussarea</i> sp.	pungi panga yurac	Primary forest	gas	No
<i>Croton lechleri</i>	lan iqui, sangre de drago	Secondary forest	cuts, anemia, kidney, stomach	Yes
Cucurbitaceae	chia	Secondary forest	scabies	No
<i>Cuphea</i> sp.	ichilla panga shica	Primary forest	arthritis	No
<i>Cyathea</i> sp.	pichichi	Primary forest	cuts, mumps?	No
<i>Cyclanthus bipartitus</i>	tsicta, papancu	Primary forest	snake bites, cataracts	No

Scientific Name	Common Name	Habitat	Use	Use Ob.
<i>Cymbopogon citratus</i>	hierba luisa	Garden	stomach ache, headache, body pains	No
<i>Cyperus</i> sp.	dunduma	Garden	diarrhea	No
<i>Desmondium axillare</i>	llutari quihua batan quihua	Secondary forest	hemorrhages, menstrual irregularities	No
<i>Desmoncus</i> sp.	bara casha	Primary forest	tumors	No
<i>Dicranopygium</i> sp.	yucu lisan	Primary forest	arthritis, rheumatism	No
<i>Dieffenbachia</i> cf. <i>daguense</i>	chaha lalo	Primary forest	luck	No
<i>Dieffenbachia</i> sp.	chaha lalo	Primary forest	hunting luck	No
<i>Diplopterys cabrerana</i>	chali panga huasca	Secondary forest	hallucinogen	No
<i>Dracontium</i> cf. <i>loretense</i>	machacui mandi	Primary forest	snake bite	No
<i>Dracontium</i> sp.	machacui mandi	Secondary forest	snake bite	No
<i>Eschweilera</i> sp.	cushillu	Primary forest	tuberculosis	No
<i>Eugenia</i> cf. <i>subterminalis</i>	manga cara yana muyu mulchi	Primary forest	cavities, menstrual irregularities, diarrhea	No
<i>Ficus</i> sp.	plor ila	Primary forest	diarrhea	No
<i>Ficus</i> sp.	puca ila, higueron	Primary forest	vermifuge	No
<i>Fittonia verschaffeltii</i>	nina curu panga yahuar panga	Primary forest	"caracha" cutaneous parasites	No
<i>Fittonia</i> sp.	yahuar panga	Primary forest	fishing luck	No
<i>Geonoma</i> sp.	macana panga	Primary forest	abdominal pains from overexertion	No
Gesneriaceae	gallu panga, yahuar sisa panga	Primary forest	hemorrhages, snake bites	No
Gesneriaceae	gallu sisa quihua, puca panga	Primary forest	menstruation	No
Gesneriaceae	gallu sisa	Primary forest	menstruation	No
Gesneriaceae	inda paju panga	Secondary forest	infection	No
<i>Grias neuberthii</i>	piton	Primary forest	emetic, malaria, hunting luck, postpartum abdominal pains	No
<i>Guadua</i> sp.	huama	Secondary forest	inflammations	No
<i>Gurania</i> sp.	sapallu panga, ahuas panga	Primary forest	scabies	No
<i>Heliconia aemygdiana</i>	lliquiri siqui panga	Secondary forest	accelerate birth	No
<i>Heliocarpus americanus</i>	damua	Secondary forest	accelerate birth	No

TABLE 1. (continued)

Scientific Name	Common Name	Habitat	Use	Use Ob.
<i>Herrania</i> sp.	sacha cambia	Secondary forest	snake bite	No
<i>Hyptis pectinata</i>	caballu quihua	Garden	tuberculosis	No
<i>Hyptis</i> sp.	chiquis quihua, chagras quihua, albahaca	Secondary forest	cough, fever, contraceptive	No
<i>Ilex guayusa</i>	huayusa	Garden	stimulant, mouth rinse, pains, fever, labor pains, mixed with hallucinogen <i>Banisteriopsis caapi</i>	Yes
<i>Inga edulis</i>	pacai, guaba	Secondary forest	colds	No
<i>Iriartea deltoidea</i>	pushiua	Primary forest	warts	No
<i>Iryanthera</i> sp.	sicu huapa	Primary forest	diarrhea, to stop menstruation	No
<i>Jacaranda glabra</i>	cupa panga yurac	Primary forest	scabies	No
Lauraceae	anis ahua	Primary forest	colds, cough, stomach ache	No
<i>Leonia glycyarpa</i>	tamia muyu yurac	Primary forest	mumps	No
<i>Libadeum</i> sp.	yacu maria panga	Primary forest	arthritis	No
<i>Lomariopsis japurensis</i>	chunda huasca	Primary forest	abortive, hasten menstruation	No
<i>Lonchocarpus nicou</i>	timun ambi	Secondary forest	ichthyotoxin, expel spirits, poison to commit suicide	Yes
<i>Macfadyena uncata</i>	tuta pishcu sillu	Secondary forest	hunting and love magic	No
<i>Maieta guianensis</i>	uchan	Primary forest	body pains, stomach ache, colds	No
<i>Malpighia</i> cf. <i>glabra</i>	machacui huishu	Garden	snake bite	No
Malvaceae	escobilla	Garden	headache	No
<i>Mansoa</i> cf. <i>alliacea</i>	ajus huasca	Secondary forest	colds, body pains, fevers, measles	No
<i>Mayna odorata</i>	ichilla mati cara	Secondary forest	snake bites	No
<i>Maytenus</i> sp.	chucchu huasha	Primary forest	stomach ache, diarrhea, body pains, anemia	Yes
Melastomataceae	puca paytsic panga	Secondary forest	skin infections	Yes
<i>Miconia</i> sp.	ahua paytsic	Primary forest	diarrhea	No
<i>Mikania</i> sp.	yahuar purungu panga	Garden	snake bites, cuts, menstruation	No
<i>Mollinedia</i> sp.	urcu chiri huayusa	Primary forest	medicinal	No
<i>Monolena</i> sp.	urti tullu	Primary forest	colds	No
<i>Monstera sprueana</i>	iqui quihua, sueda con sueda	Primary forest	anemia, inflammations	No

Scientific Name	Common Name	Habitat	Use	Use Ob.
Moraceae	chinchí yurac	Primary forest	tumors	No
<i>Myroxylon balsamum</i>	balsamo	Secondary forest	diarrhea, colds	No
<i>Nicotiana tabacum</i>	yurac tahucu	Garden	ritual cleansing, sore muscles, head colds, sore throats, sinus congestion, narcotic, colic, body pains, tonic, "shungu rigushca paju," bot fly larva, protection from snake venom	Yes
<i>Orthostichopsis tortipilis</i>	tuca	Primary forest	cuts, internal pains, stomach ache, avoid being poisoned by snake venom	No
<i>Otoba parvifolia</i>	huapa yura	Primary forest	diarrhea	No
<i>Ouratea</i> sp.	iqui ichilla cara amarun caspi	Primary forest	diarrhea, postpartum abdominal pains, menorrhagia	No
<i>Pariana</i> sp.	zuru panga	Garden	rattle/fan for curing ceremonies	No
<i>Parkia multijuga</i>	sutanga	Primary forest	hypopigmentation	No
Pedaliaceae	virgin mama sisá	Garden	accelerate birth	No
<i>Petiveria alliacea</i>	condiciun panga	Garden	colds, cough	No
<i>Philodendron</i> sp. nov. ?	sacha lalo	Primary forest	malaise, inflammations, internal body pains, hunting luck	No
<i>P.</i> cf. <i>uleanum</i>	nan ambi huasca	Primary forest	snake bite	No
<i>Philodendron</i> sp. nov.	lalo	Primary forest	hunting luck	No
<i>Philodendron</i> sp. possibly nov.	ichilla zingra panga	Primary forest	rheumatism, arthritis	No
<i>Phytolacca</i> cf. <i>rivinoides</i>	huataracu muyu	Secondary forest	tuberculosis	No
<i>Piper</i> sp.	shia, armallu	Primary forest	diarrhea, nausea	No
<i>Piper</i> sp.	ringri panga Santa María de anis	Garden	colds, body pains	No
<i>Piper</i> sp.	urcu shia	Primary forest	diarrhea, nausea	No
<i>Piper</i> sp.	mucu tullu yurac	Secondary forest	diabetes	No
<i>Piper</i> sp.	chugri yuyu	Primary forest	cuts	No
<i>Piper</i> sp.	basu panga	Primary forest	hernia	No
<i>Piptadenia</i> sp.	chunda rucu paju yurac, urcu tamburu	Primary forest	blisters	No
<i>Piptadenia</i> sp.	asna huaranga	Secondary forest	diarrhea	Yes
<i>Plagiochila</i> sp.	tuca	Primary forest	cuts, internal pains, stomach ache, avoid being poisoned by snake venom	No

TABLE 1. (continued)

Scientific Name	Common Name	Habitat	Use	Use Ob.
Poaceae	shinglu	Secondary forest	rheumatism, whooping cough	No
<i>Polybotrya crassirhizoma</i>	cutu chupa	Secondary forest	diarrhea	No
<i>Portulaca</i> sp.	chucli quihua	Garden	kidney, diabetes	No
<i>Potalia amara</i>	curarina	Secondary forest	snake bites	No
<i>Pothomorphe peltata</i>	cari maria panga	Garden	tooth ache, colds, inflammations	No
<i>P. umbellata</i>	maria panga	Garden	inflammations, tooth ache, colds	Yes
<i>Pouteria caimito</i>	abiyu	Garden	rattle/fan for curing ceremonies, scabies	No
<i>Protium nodulosum</i>	siri quillu	Primary forest	colds	No
<i>Psychotria viridis</i>	sami ruca	Garden	mixed with the hallucinogen <i>Banisteriopsis caapi</i>	No
<i>Renealmia</i> sp.	ichilla	Secondary forest	snake bite	No
<i>Renealmia</i> sp. ?	shiguango jatun	Secondary forest	snake bite	No
<i>Retiniphyllum</i> sp.?	shiguango urcu matiri	Primary forest	rheumatism, hunting luck, colic	No
<i>Rheedia</i> sp.	pungara	Primary forest	scabies, "charas"	No
<i>Rheedia</i> sp.	chunda rucu mulchi	Primary forest	postpartum colic	No
<i>Ricinus communis</i>	atalpusamuyu	Secondary forest	arthritis	No
Rubiaceae	mucu caspi yurac	Primary forest	tonic	No
<i>Salpichlaena volubilis</i>	urcu tutayu	Primary forest	diarrhea	Yes
<i>Scleria</i> sp.	shinglu	Secondary forest	colds	No
<i>Selaginella exaltata</i>	hualumbu huasca	Primary forest	colds, cough	No
<i>S. geniculata</i>	zancudo quihua	Primary forest	insect repellent	No
<i>Serjania</i> sp.	chunda rucu paju huasca, rayu huasca	Secondary forest	"chunda rucu paju" blisters	Yes
<i>Siparuna</i> sp.	malagri panga	Secondary forest	infections	No
<i>Siparuna</i> sp.	mal agri panga	Secondary forest	infections	No
<i>Smilax</i> sp.	quilambu casha	primary forest	tumors	No
<i>Smilax</i> sp.	quilambu casha huasca	Primary forest	cataracts, diarrhea	No
Solanaceae	asna panga yurac, ataqui panga	Primary forest	epilepsy	No
Solanaceae	pupu huasca	Primary forest	avoid bleeding from umbilical chord	No
Solanaceae	apumpu cara	Secondary forest	measles	No

Scientific Name	Common Name	Habitat	Use	Use Ob.
Solanaceae	yacu huantuc	Primary forest	medicinal	No
Solanaceae	yacu caspi	Secondary forest	headache	No
Solanaceae?	illa huanga	Secondary forest	tuberculosis	No
	butui			
<i>Solanum</i> sp.	ataqui panga, asna panga	Primary forest	epilepsy	No
<i>Solanum</i> sp.	nina curu	Secondary forest	"nina curu paju" (a parasitic skin infection)	Yes
<i>Solanum</i> sp.	paju panga inda paju	Secondary forest	"ituc paju" (a parasitic skin infection)	No
<i>Sparattanthelium glabrum</i>	dunduma	Secondary forest	stomach ache, diarrhea, malaria, body pains	Yes
<i>Spathiphyllum</i> sp.	huasca hualun mandi	Primary forest	expel bot fly larvae	No
<i>Spigelia</i> sp.	cuica quihua	Garden	vermifuge	Yes
<i>Swartzia simplex</i>	negro caspi	Primary forest	tonic	No
<i>Tabernaemontana sananho</i>	tsicta	Primary forest	labor pains	No
<i>Tabernaemontana</i> sp.	uchu tsicta	Primary forest	skin irritations	No
<i>Thelypteris angustifolia</i>	sunu panga shica	Primary forest	arthritis	No
<i>Theobroma bicolor</i>	patas	Secondary forest	diarrhea	Yes
<i>T. cacao</i>	cacao	Secondary forest	hypopigmentation	No
<i>Tococa</i> sp.	uchan	Primary forest	medicinal	No
<i>Tournefortia</i> sp.	tsaca huasca, sacha purutu huasca	Garden	infections	No
<i>Tovomitopsis membranacea</i>	uhu angu yurac	Primary forest	colds	No
<i>Tovomitopsis</i> sp. ?	uhu angu	Primary forest	colds	No
<i>Urera lacinata</i>	chunda chini	Primary forest	body pains, measles	Yes
<i>Urera</i> sp.	papaya chini	Garden	body pains, stomach ache	Yes
Urticaceae	biu chini	Secondary forest	"huairashca," measles	No
Valerianaceae	tucsi quihua, api quihua	Garden	sharp internal pain	No
Verbenaceae	virvina	Garden	malaria, diarrhea, fever	No
<i>Vernonia patens</i>	liunchic, chilca	Secondary forest	eye irritation, diarrhea, fever, bronchitis	No
<i>Weigeltia</i> sp.	sacha tahucu	Primary forest	body pains, headache, malaise, hunting luck	Yes
<i>Witheringia solanacea</i>	zimbiyu yurac panga	Secondary forest	malaria, diarrhea, inflammations, scabies,	No
<i>Zingiber officinale</i>	ajiringri	Garden	diarrhea, nausea, stomach ache	Yes
Undetermined	nina curu paju yurac	Secondary forest	"nina curu paju" (a parasitic skin infection)	
Undetermined	nina curu panga	Secondary forest	eye infections	No

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